

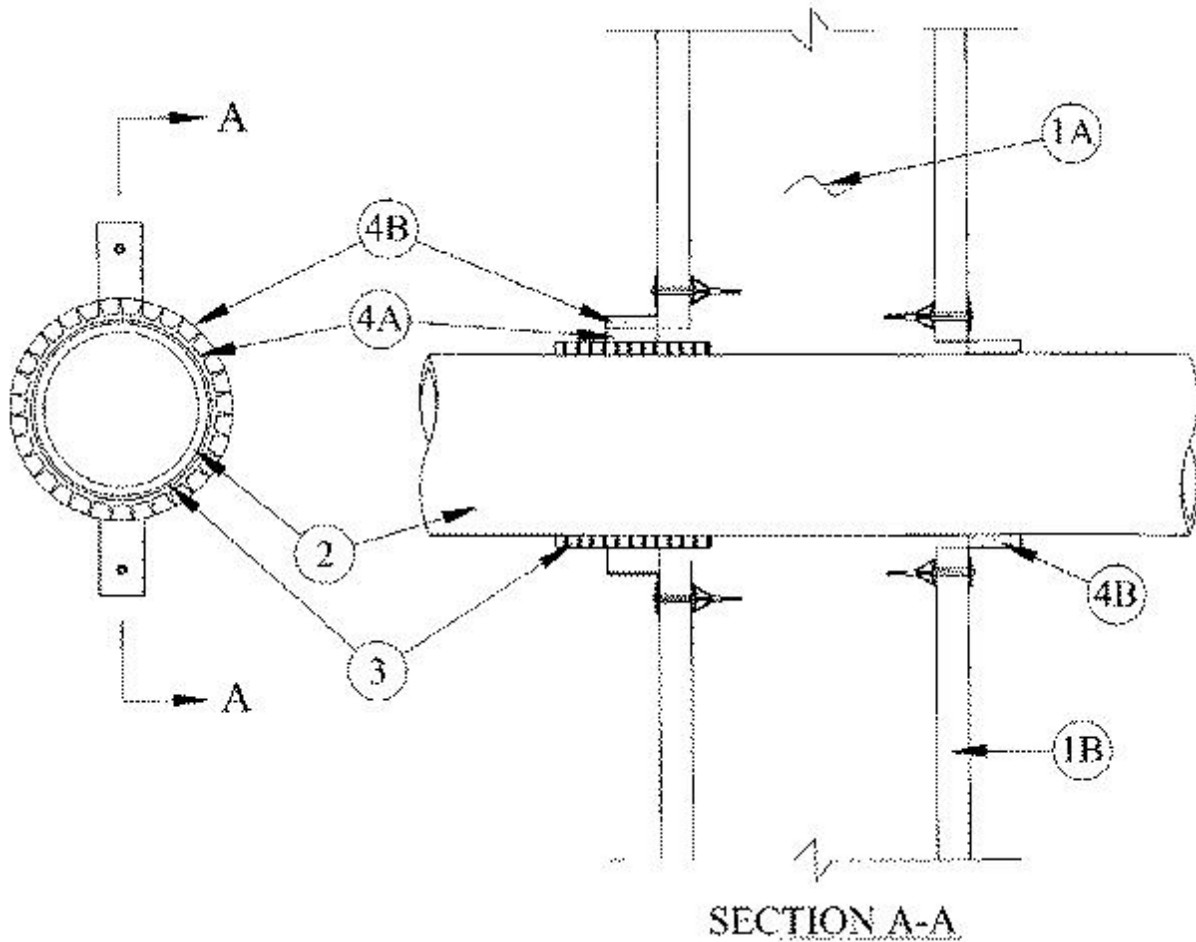


### System No. W-L-2207

June 02, 2011

F Rating — 1 Hr

T Rating — 0 Hr



**1. Wall Assembly** — The 1 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

**A. Studs** — Wall framing shall consist of either wood or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC.

**B. Gypsum Board\*** — Min 5/8 in. (16 mm) thick, 4 ft (1219 mm) wide with square or tapered edges. The gypsum board type, thickness, number of layers and orientation shall be as specified in the individual U300 or U400 Wall and Partition Design. Max diam of opening is 4-1/2 in (114 mm).

**2. Through Penetrants** — One nonmetallic pipe to be centered within the firestop system. The nom annular space between pipe or pipe coupler and periphery of opening shall be 1/4 in. (6 mm). Pipe to be rigidly supported on both sides of wall assembly. The following types and sizes of nonmetallic pipes may be used:

**A. Polyvinyl Chloride (PVC) Pipe** — Nom 3 in. (76 mm) diam (or smaller) Schedule 40 solid or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

**B. Chlorinated Polyvinyl Chloride (CPVC) Pipe** — Nom 3 in. (76 mm) diam (or smaller) SDR13.5 or Schedule 40 CPVC pipe for use in closed (process or supply) piping systems. Schedule 40 CPVC pipe for use in vented (drain, waste or vent) piping systems.

**3. Pipe Coupler** — Nom 3 in. (76 mm) diam (or smaller) pipe coupler, made of the same material as the pipe, installed at on one side of wall. Pipe coupler to be installed such that it coincides with the firestop device (Item 4B).

**4. Firestop System** — The firestop system shall consist of the following:

**A. Fill, Void or Cavity Material\* — Wrap Strip** — Nom 1/4 in. (6 mm) thick by 1 in. (25 mm) wide intumescent wrap strip tightly wrapped around the outer circumference of the pipe coupler. Wrap strip secured with tape or tie wire and positioned abutting surface of the wall. Used in conjunction with firestop device (Item 4B).

**RECTORSEAL** — Metacaulk Wrap Strip

**B. Firestop Device\*** — Firestop device consists of a galv steel collar lined with an intumescent material sized to fit specific diam of the through penetrant. Device to be installed around through penetrant, or through penetrant, pipe coupler and wrap strip in accordance with accompanying installation instructions. On side of wall without pipe coupler, nom size of device shall be equal to nom diam of pipe. On side of wall containing pipe coupler, nom size of device shall be 1 in. (25 mm) larger than the nom diam of pipe. Device incorporates anchor tabs for securement to both surface of wall by means of No. 10 by 1-1/2 in. (38 mm) laminate screws or 1/8 in. (3 mm) diam by 2 in. (51 mm) long hollow wall anchors. Device to be secured at each tab.

**RECTORSEAL** — Metacaulk Pipe Collar

**C. Fill, Void or Cavity Material\* - Wrap Strip** — (Optional-Not as Shown) As an alternate to the wrap strip (Item 4A) and firestop device (Item 4B), nom 1/4 in. (6 mm) thick by 2 in. (51 mm) wide wrap strip shall be used in conjunction with the steel collar (Item 4D). Layers of wrap strip are individually wrapped around the pipe or pipe and coupler with ends butted and held in place with tape. Butted ends in successive layers shall be offset. The edge of the wrap strip shall abut the surface of the wall. The nom pipe size and number of layers of wrap strip on each side of the wall shall be as shown in the table below:

| Nom Pipe Size In.(mm) | No. of Layers of Wrap Strip Around Pipe Coupler | No. of Layers of Wrap Strip on Side Opposite Pipe Coupler |
|-----------------------|---|---|
| 1-1/2 (38)            | 2   | 1   |
| 2 (51)                | 2   | 1   |
| 3 (76)                | 3   | 2   |

**RECTORSEAL** — Metacaulk Wrap Strip

**D. Steel Collar** — Collar fabricated from coils of precut min 0.016 in. thick (No. 28 gauge) galv steel available from the fill material manufacturer. Collar shall be nom 2 in. (51 mm) deep with 1 in. (25 mm) wide by 1-1/4 in. (32 mm) long anchor tabs on 4 in. (102 mm) centers for securement to the wall. In addition, the collar contains retainer tabs, 3/4 in. (19 mm) wide, located opposite the anchor tabs. The collar shall be wrapped over the pipe and overlapped min 2 in. (51 mm) The retaining tabs opposite the anchor tabs are folded 90 degrees towards the pipe to maintain the annular space around the pipe and to retain the caulk (Item 3C). Steel collar is slid along the pipe until it butts the surface of the wall. Collar secured to wall surface at each anchor tab with 1-1/2 in. (38 mm) long laminate screws or 1/8 in. (3 mm) by 2 in. (51 mm) long hollow wall anchors. Collars are installed on each side of wall.

\*Bearing the UL Classification Mark